



West Virginia

EPI-LOG

Third Quarter/2015
Volume 34, No. 3

2015-2016 flu season

New vaccines & guidelines

The Centers for Disease Control and Prevention (CDC) Advisory Committee on Immunization Practices (ACIP) has published its 2015-16 influenza recommendations and continues to recommend universal influenza vaccination for all persons 6 months of age and older. Influenza can occur at any time so getting the vaccine as soon as it is available provides protection if the flu season starts early.

For 2015-16, United States-licensed trivalent influenza vaccines will contain hemagglutinin (HA) derived from an A/California/7/2009 (H1N1)-like virus, an A/Switzerland/9715293/2013 (H3N2)-like virus, and a B/Phuket/3073/2013-like (Yamagata lineage) virus. This represents changes in the influenza A (H3N2) virus and the influenza B virus as compared with the 2014-15 season. Quadrivalent influenza vaccines will contain these vaccine viruses, and a B/Brisbane/60/2008-like (Victoria lineage) virus, which is the same Victoria lineage virus recommended for quadrivalent formulations in 2013-14 and 2014-15.



Adults and older children are recommended to receive one dose of influenza vaccine each year, but children ages 6 months through 8 years require two doses of influenza vaccine (administered at least 4 weeks apart) during their first vaccination season to optimize immune response.

(See *Flu Season*, page 2)

Statewide Disease Facts & Comparisons

A quarterly publication
of the West Virginia
Office of Epidemiology
& Prevention Services

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Earl Ray Tomblin, Governor
Karen L. Bowling, Cabinet Secretary
Dr. Rahul Gupta, Commissioner and
State Health Officer

(Flu Season, continued from page 1)

For 2015-16, ACIP recommends the following:

1: All persons 6 months of age should receive influenza vaccine annually. Influenza vaccination should not be delayed to procure a specific vaccine preparation if an appropriate one is already available.

2: For healthy children aged 2 through 8 years, who have no contraindications or precautions, either live (LAIV) or inactivated (IIV) is an appropriate option. No preference is expressed for LAIV or IIV for any person aged 2 through 49 years for whom either vaccine is appropriate. Healthcare providers should consult the package insert to ensure an age-appropriate formulation of vaccine is being provided to pediatric patients. Young children who get the flu shot simultaneously with pneumococcal vaccine (PCV13) and/or DTaP vaccine might be slightly more likely to have a seizure caused by fever.

3: LAIV should not be used in the following populations:

- Persons aged <2 years or >49 years
- Children aged 2 through 17 years who are receiving aspirin or aspirin-containing products
- Persons who have experienced severe allergic reactions to the vaccine or any of its components, or to a previous dose of any influenza vaccine
- Pregnant women
- Immunocompromised persons
- Persons with a history of egg allergy
- Children aged 2 through 4 years who have asthma or who have had a wheezing episode noted in the medical record within the past 12 months, or for whom parents report that a healthcare provider stated that they had wheezing or asthma within the last 12 months. For persons aged >5 years with asthma, recommendations are described in item 4 of this list
- Persons who have taken influenza antiviral medications within the previous 48 hours

4: In addition to the groups for whom LAIV is not recommended above, the "Warnings and Precautions" section of the LAIV package insert indicates that persons of any age with asthma might be at increased risk for wheezing after administration of LAIV. The package insert also notes that the safety of LAIV in persons with other underlying medical conditions that might predispose them to complications after wild-type influenza virus infection (e.g., chronic pulmonary, cardiovascular [except isolated hypertension], renal, hepatic, neurologic, hematologic, or



metabolic disorders [including diabetes mellitus]), has not been established. These conditions, in addition to asthma in persons aged >5 years, should be considered precautions for the use of LAIV.

5: Persons who provide care for severely immunosuppressed persons who require a protective environment should not receive LAIV, or should avoid contact with such persons for 7 days after receipt, given the theoretical risk for transmission of the live attenuated vaccine virus to close contacts.

There have been significant changes to influenza vaccination recommendations with regard to persons with egg allergy. Please review the "Influenza Vaccination of Persons with a History of Egg Allergy" guidelines on page 3 for this information.

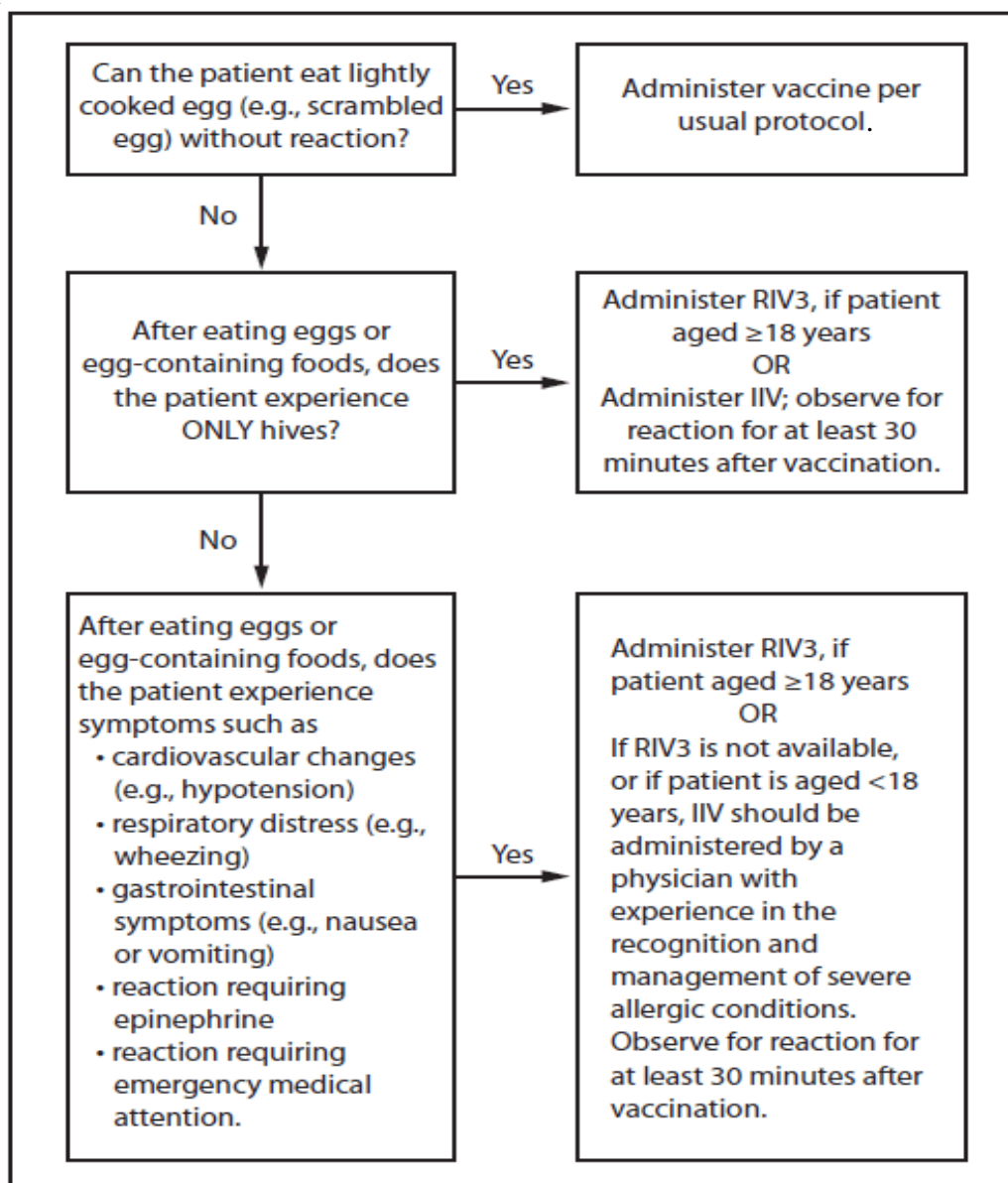
The Vaccine Information Statement (VIS) for IIV can be found at www.cdc.gov/vaccines/hcp/vis/vis-statements/flu.pdf.

The VIS for LAIV can be found www.cdc.gov/vaccines/hcp/vis/vis-statements/flulive.pdf.

The complete influenza vaccination recommendations of the ACIP can be found at www.cdc.gov/mmwr/preview/mmwrhtml/mm6430a3.htm.

Healthcare providers in West Virginia are required to report outbreaks of influenza and pediatric mortality associated with influenza. For more information on reporting and other influenza surveillance information, visit the West Virginia Division of Infectious Disease Epidemiology (DIDE) at www.dhhr.wv.gov/oeps/disease/flu/Pages/default.aspx or contact DIDE by phone at 304-558-5358, ext 1. ☒

Recommendations regarding influenza vaccination of persons who report allergy to eggs*
Advisory Committee on Immunization Practices, United States, 2015–16 influenza season



Abbreviations: IIV = inactivated influenza vaccine, trivalent or quadrivalent; RIV3 = recombinant influenza vaccine, trivalent.

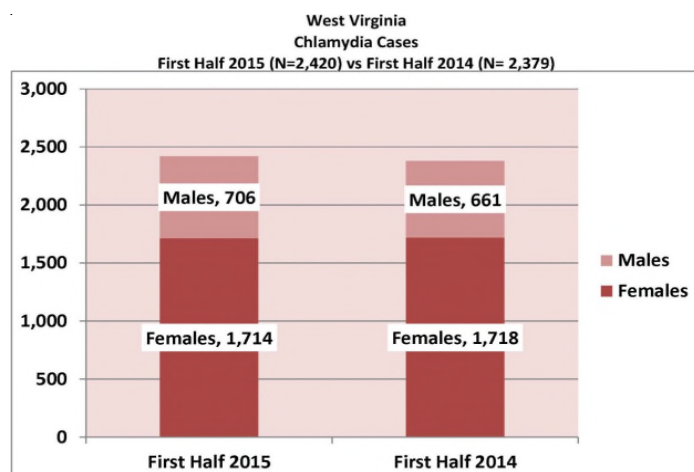
* Persons with egg allergy may tolerate egg in baked products (e.g., bread or cake). Tolerance to egg-containing foods does not exclude the possibility of egg allergy (Erlewyn-Lajeunesse et al., Recommendations for the administration of influenza vaccine in children allergic to egg. *BMJ* 2009;339:b3680).

For persons who have no known history of exposure to egg, but who are suspected of being egg-allergic on the basis of previously performed allergy testing, consultation with a physician with expertise in the management of allergic conditions should be obtained prior to vaccination. Alternately, RIV3 may be administered if the recipient is at least 18 years old. ☒

Chlamydia, gonorrhea, and syphilis in West Virginia: Comparing early 2014 and early 2015

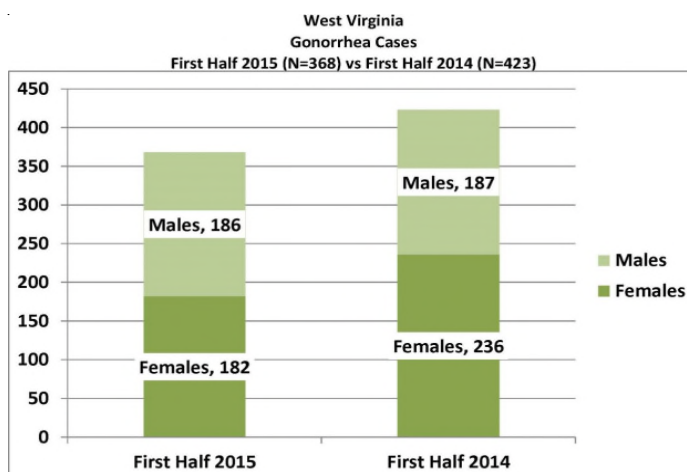
Chlamydia is the most common sexually transmitted infection (STI) diagnosed in West Virginia with 2,420 cases occurring in all 55 counties for the first half (FH) of 2015 reflecting an increase of 1.4% as compared to 2,386 cases reported in FH 2014. Females (1,714 cases) account for 70.8% of all reported chlamydia infections. Kanawha (384 cases), Monongalia (252 cases), Cabell (223 cases), Wood (162 cases) and Berkeley (146 cases) counties are ranked the highest for chlamydia infections and report 48.2% of all cases in the State.

For FH 2015, 368 cases (a 1.3% decrease) of gonorrhea were diagnosed compared to 423 for this same time period last year. Males (186 cases) account for 50.8% of all reported gonorrhea infections. Kanawha (74 cases), Cabell (73 cases), Berkeley (49 cases), and Monongalia (23 cases) counties are ranked the highest for gonococcal infections and report 59.5% of all cases in the State. County-by-county data can be seen on pages 5-6.



Among all age groups, the 15 – 19 year olds (N=689) and 20 – 24 year olds (N=1,071) have a combined total of 1,760 chlamydia infections for FH 2015, accounting for 72% of all cases. For FH 2014, the same age group reported 1,753 cases and accounted for approximately 73.7% of reported cases.

CHLAMYDIA						
	FH 2015			FH 2014		
Age	Male	Female	Total	Male	Female	Total
<10	0	0	0	1	0	1
10-14	2	18	20	0	22	22
15-19	123	566	689	126	534	660
20-24	323	748	1,071	296	797	1,093
25-29	146	237	383	129	230	359
30-34	56	78	134	56	75	131
35-39	26	51	77	29	33	62
40-44	8	8	16	12	13	25
>44	22	8	30	12	14	26
Total	706	1,714	2,420	661	1,718	2,379



With respect to gonorrhea, the age group of 20 to 29 had the highest occurrence of reported cases (206) in FH 2015, representing approximately 56.0% of all cases in the State. For FH 2014, the same age group had the highest occurrence of gonorrhea infections (246 cases) and accounted for approximately 58.1% of all reported cases.

GONORRHEA						
	FH 2015			FH 2014		
Age	Male	Female	Total	Male	Female	Total
<10	0	0	0	1	0	1
10-14	0	2	2	0	1	1
15-19	15	51	66	17	56	73
20-24	57	66	123	63	100	163
25-29	43	40	83	39	44	83
30-34	20	10	30	26	17	43
35-39	13	8	21	10	12	22
40-44	10	2	12	9	2	11
>44	28	3	31	22	4	26
Total	186	182	368	187	236	423

(See *STDs*, page 5)

(STDs, continued from page 4)

West Virginia

Chlamydia

First Half 2015 (N=2,420) vs First Half 2014 (2,379)

COUNTY	First Half 2015		
	Males	Females	Total
BARBOUR	0	10	10
BERKELEY	44	102	146
BOONE	1	5	6
BRAXTON	5	3	8
BROOKE	4	14	18
CABELL	81	142	223
CALHOUN	1	5	6
CLAY	3	8	11
DODDRIDGE	4	0	4
FAYETTE	21	54	75
GILMER	2	5	7
GRANT	4	7	11
GREENBRIER	17	30	47
HAMPSHIRE	4	9	13
HANCOCK	6	29	35
HARDY	4	8	12
HARRISON	11	43	54
JACKSON	5	10	15
JEFFERSON	20	55	75
KANAWHA	108	276	384
LEWIS	2	12	14
LINCOLN	2	9	11
LOGAN	5	18	23
MARION	24	66	90
MARSHALL	13	37	50
MASON	3	23	26
MCDOWELL	4	9	13
MERCER	31	71	102
MINERAL	5	16	21
MINGO	5	9	14
MONONGALIA	90	162	252
MONROE	5	4	9
MORGAN	3	7	10
NICHOLAS	2	3	5
OHIO	15	51	66
PENDLETON	1	3	4
PLEASANTS	3	5	8
POCAHONTAS	0	2	2
PRESTON	13	22	35
PUTNAM	7	19	26
RALEIGH	32	76	108
RANDOLPH	14	27	41
RITCHIE	3	8	11
ROANE	4	10	14
SUMMERS	1	10	11
TAYLOR	3	7	10
TUCKER	3	3	6
TYLER	3	5	8
UPSHUR	7	28	35
WAYNE	3	22	25
WEBSTER	2	3	5
WETZEL	6	12	18
WIRT	0	3	3
WOOD	40	122	162
WYOMING	7	15	22
Total	706	1,714	2,420

COUNTY	First Half 2014		
	Males	Females	Total
BARBOUR	7	9	16
BERKELEY	52	142	194
BOONE	4	11	15
BRAXTON	0	10	10
BROOKE	0	15	15
CABELL	64	137	201
CALHOUN	0	2	2
CLAY	2	5	7
DODDRIDGE	4	6	10
FAYETTE	17	36	53
GILMER	3	0	3
GRANT	5	6	11
GREENBRIER	14	22	36
HAMPSHIRE	6	13	19
HANCOCK	11	23	34
HARDY	2	8	10
HARRISON	19	62	81
JACKSON	4	13	17
JEFFERSON	25	61	86
KANAWHA	96	270	366
LEWIS	10	26	36
LINCOLN	4	15	19
LOGAN	6	24	30
MARION	24	69	93
MARSHALL	9	17	26
MASON	1	22	23
MCDOWELL	1	17	18
MERCER	30	62	92
MINERAL	8	18	26
MINGO	5	14	19
MONONGALIA	71	164	235
MONROE	3	1	4
MORGAN	3	9	12
NICHOLAS	3	6	9
OHIO	7	47	54
PENDLETON	1	4	5
PLEASANTS	1	4	5
POCAHONTAS	0	1	1
PRESTON	13	29	42
PUTNAM	9	29	38
RALEIGH	32	78	110
RANDOLPH	18	15	33
RITCHIE	4	10	14
ROANE	2	7	9
SUMMERS	1	2	3
TAYLOR	7	10	17
TUCKER	0	2	2
TYLER	0	7	7
UPSHUR	11	28	39
WAYNE	7	21	28
WEBSTER	1	3	4
WETZEL	3	7	10
WIRT	0	2	2
WOOD	31	85	116
WYOMING	0	12	12
Total	661	1,718	2,379

(See STDs, page 6)

(STDs, continued from page 5)

West Virginia
Gonorrhea

First Half 2015 (N=368) vs First Half 2014 (N=423)

COUNTY	First Half 2015		
	Males	Females	Total
BARBOUR	0	0	0
BERKELEY	33	16	49
BOONE	1	1	2
BRAXTON	0	0	0
BROOKE	0	1	1
CABELL	30	43	73
CALHOUN	1	1	2
CLAY	0	0	0
DODDRIDGE	1	0	1
FAYETTE	3	2	5
GILMER	1	1	2
GRANT	0	0	0
GREENBRIER	0	2	2
HAMPSHIRE	1	0	1
HANCOCK	7	3	10
HARDY	1	1	2
HARRISON	4	4	8
JACKSON	2	1	3
JEFFERSON	6	3	9
KANAWHA	31	43	74
LEWIS	0	0	0
LINCOLN	0	0	0
LOGAN	0	0	0
MARION	9	6	15
MARSHALL	0	1	1
MASON	0	3	3
MCDOWELL	1	3	4
MERCER	10	0	10
MINERAL	0	0	0
MINGO	1	7	8
MONONGALIA	14	9	23
MONROE	0	0	0
MORGAN	1	0	1
NICHOLAS	0	0	0
OHIO	2	4	6
PENDLETON	0	0	0
PLEASANTS	0	0	0
POCAHONTAS	0	0	0
PRESTON	2	0	2
PUTNAM	1	3	4
RALEIGH	13	11	24
RANDOLPH	0	0	0
RITCHIE	1	0	1
ROANE	2	1	3
SUMMERS	0	1	1
TAYLOR	1	0	1
TUCKER	0	0	0
TYLER	0	0	0
UPSHUR	1	1	2
WAYNE	1	0	1
WEBSTER	0	0	0
WETZEL	1	1	2
WIRT	0	0	0
WOOD	2	8	10
WYOMING	1	1	2
Total	186	182	368

COUNTY	First Half 2014		
	Males	Females	Total
BARBOUR	0	1	1
BERKELEY	18	16	34
BOONE	1	1	2
BRAXTON	0	0	0
BROOKE	0	4	4
CABELL	33	40	73
CALHOUN	0	0	0
CLAY	0	1	1
DODDRIDGE	0	0	0
FAYETTE	1	2	3
GILMER	0	0	0
GRANT	0	0	0
GREENBRIER	0	3	3
HAMPSHIRE	0	0	0
HANCOCK	4	4	8
HARDY	0	0	0
HARRISON	7	12	19
JACKSON	1	0	1
JEFFERSON	12	8	20
KANAWHA	27	38	65
LEWIS	0	1	1
LINCOLN	0	0	0
LOGAN	4	5	9
MARION	8	12	20
MARSHALL	2	1	3
MASON	0	0	0
MCDOWELL	5	3	8
MERCER	16	13	29
MINERAL	3	3	6
MINGO	1	0	1
MONONGALIA	10	11	21
MONROE	0	0	0
MORGAN	1	1	2
NICHOLAS	0	0	0
OHIO	3	19	22
PENDLETON	0	0	0
PLEASANTS	1	1	2
POCAHONTAS	0	0	0
PRESTON	0	0	0
PUTNAM	2	2	4
RALEIGH	8	7	15
RANDOLPH	0	0	0
RITCHIE	0	0	0
ROANE	1	1	2
SUMMERS	2	1	3
TAYLOR	1	3	4
TUCKER	0	0	0
TYLER	0	1	1
UPSHUR	2	3	5
WAYNE	0	2	2
WEBSTER	0	0	0
WETZEL	3	2	5
WIRT	1	0	1
WOOD	9	12	21
WYOMING	0	2	2
Total	187	236	423

(See STDs, page 7)

(STDs, continued from page 6)

In FH 2015, the 2,420 cases of chlamydia diagnosed in West Virginia represent a statewide incidence rate of 130.6 per 100,000 (based on 2010 Census data). This is an increase from 2,379 cases in FH 2014 (128.4 cases per 100,000 incidence rate). The African American population (532.3 incidences per 100,000) has the greatest disparity of chlamydia infections followed by Asians (48.4 cases per 100,000 population). ➔

The 368 cases of gonorrhea diagnosed in West Virginia during FH 2015 represent a 19.9 incident rate per 100,000. The African American (196.4 incidences per 100,000) and Asian population (48.36 incidences per 100,000) were the highest for FH 2015, while African Americans (213.9 per 100,000) and the American Indians/Alaskan Natives (26.4 per 100,000) were ranked the highest for FH 2014. ➔

FH 2015 showed a slight increase in syphilis cases over FH 2014. The age groups reporting the greatest number of syphilis cases in West Virginia are 20-24 years old (9 cases) and 25-29 years old (8 cases); this is a total of 17 cases during FH 2015, accounting for approximately 46.0% of all infections. For FH 2014, the same age groups reported 22 cases and accounted for approximately 73.7% of reported cases. For the 30-34 and over-44 age groups, the number of cases in FH 2015 was twice the number in FH 2014. ➔

As for early syphilis cases diagnosed in FH 2015, the 37 cases represent a 2.0 incident rate per 100,000 population. The Asian population (24.2 incidence rate per 100,000) was the highest ranked for FH 2015, while American Indians/Alaskan Natives (26.4 incidence rate per 100,000) were ranked the highest for FH 2014. ☒ ➔

CHLAMYDIA					
Race	2010 Population	2015		2014	
		#	Rate	#	Rate
White	1,739,988	1,520	87.4	1,515	87.1
Black or African American	63,124	371	587.7	336	532.3
American Indian and Alaska Native	3,787	0	0.0	1	26.4
Asian	12,406	5	40.3	6	48.4
Native Hawaiian and Other Pacific Islander	428	1	233.6	2	467.3
Multiple Races	27,142	10	36.8	12	44.2
Hispanic	22,268	21	94.3	21	94.3
Unknown	-	492	-	486	-
Total population	1,852,994	2,420	130.6	2,379	128.4

GONORRHEA					
Race	2010 Population	2015		2014	
		#	Rate	#	Rate
White	1,739,988	184	10.6	225	12.9
Black or African American	63,124	124	196.4	135	213.9
American Indian and Alaska Native	3,787	0	0.0	1	26.4
Asian	12,406	6	48.4	3	24.2
Native Hawaiian and Other Pacific Islander	428	0	0.0	0	0.0
Multiple Races	27,142	3	11.1	3	11.1
Hispanic	22,268	4	18.0	1	4.5
Unknown	-	47	-	55	-
Total population	1,852,994	368	19.9	423	22.8

EARLY SYPHILIS*						
Age	FH 2015			FH 2014		
	Male	Female	Total	Male	Female	Total
<10	0	0	0	0	0	0
10-14	0	1	1	0	0	0
15-19	0	2	2	1	1	2
20-24	8	1	9	13	0	13
25-29	8	0	8	8	1	9
30-34	4	2	6	2	0	2
35-39	3	0	3	3	1	4
40-44	1	1	2	1	2	3
>44	6	0	6	3	0	3
Total	30	7	37	31	5	36

* Early syphilis includes primary, secondary and early latent (less than 1 year)

EARLY SYPHILIS					
Race	2010 Population	2015		2014	
		#	Rate	#	Rate
White	1,739,988	29	1.7	26	1.5
Black or African American	63,124	5	7.9	9	14.3
American Indian and Alaska Native	3,787	0	0.0	1	26.4
Asian	12,406	3	24.2	0	0.0
Native Hawaiian and Other Pacific Islander	428	0	0.0	0	0.0
Hispanic	22,268	0	0.0	0	0.0
Total population	1,852,994	37	2.0	36	1.9

CDC funding to improve disease surveillance in West Virginia

The Centers for Disease Control and Prevention (CDC) Epidemiology and Laboratory Capacity (ELC) grant made new funding available to states to enhance surveillance of vaccine preventable disease (VPD), as well as create a reporting process for acute flaccid myelitis (AFM). West Virginia applied for and was awarded funds that will allow for the hiring of a Vaccine Preventable Disease Surveillance Coordinator who will be responsible for ensuring both timely and complete investigations for all VPDs through coordination across epidemiology, laboratory, immunization and informatics. More complete and timely data collected through routine investigations will help to better measure the burden of disease and vaccine impact, thus resulting in more effective decision making and public health action. Three diseases are the main focus of this grant opportunity. They include:

- Acute flaccid myelitis
- Varicella
- Meningococcal disease

The major activities for each of the three diseases are as follows:

Acute flaccid myelitis

- Establish surveillance
- Educate physicians and microbiology laboratories about AFM

- Ensure that suspected cases of AFM are reported as soon as they are identified, and information is collected using the case report form available at www.dhhr.wv.gov/oeps/disease/atoz/pages/acute-flaccid-myelitis.aspx

- For cases meeting the case definition, ensure that specimens are collected (stool, respiratory and cerebrospinal fluid) for testing through the CDC

Varicella

- Educate local health departments, schools, day care facilities and camps to report outbreaks and clusters of varicella

- Collect additional information regarding individuals who are identified as part of an outbreak

- Collect specimens for testing through the West Virginia Office of Laboratory Services

Meningococcal disease

- Collect case data on key variables (e.g., serogroup, outcome, vaccination status, outbreak/cluster related, men who have sex with men (MSM), college students)

- Ensure that isolates are collected from cases with meningococcal disease for serogrouping and additional molecular classification

Once the position is filled, the Vaccine Preventable Disease Epidemiologist will work with the Vaccine Preventable Disease Coordinator to implement the activities outlined. For the most recent information regarding the percent of investigations with complete information for select surveillance indicators, please visit www.dhhr.wv.gov/oeps/disease/Surveillance/Pages/Data-Feedback.aspx. ☒

Pre-exposure prophylaxis highlighted by White House on World AIDS Day

December 1, 2015, marked the 27th observance of World AIDS Day. Since 1988, this global event has been dedicated to raising awareness of the AIDS pandemic caused by the spread of HIV infection, and mourning those who have died of the disease.

The theme of World AIDS Day this year, “The Time to Act Is Now,” was especially relevant with the release of the White House National HIV/AIDS Strategy Action Plan. This plan details steps to implement the National HIV/AIDS Strategy for the United States: Updated to 2020 (NHAS) released this past summer. The Action Plan provides steps to advance the vision of becoming a nation where HIV infections are rare.

One of the measures called for is the scale-up of oral pre-exposure prophylaxis (PrEP) medication that is effective at preventing HIV infection. The use of PrEP with other proven prevention tools offers heightened potential to reduce the number of new infections. However, recently released data indicate that there is much work to do to increase the use of PrEP. According to a recent edition of CDC’s *Vital Signs*, more than one million adults who are at substantial risk for HIV could potentially benefit from PrEP. But nationwide, only one in three primary care doctors and nurses is aware of PrEP. ☒

West Virginia Infectious Disease Outbreak Report

July - September 2015

Introduction

In West Virginia, outbreaks are immediately reportable to local health departments (LHDs) regardless of setting, as per Reportable Disease Rule 64CSR-7. LHDs, in collaboration with the West Virginia Bureau for Public Health, Division of Infectious Disease Epidemiology (DIDE), investigate all reported outbreaks. DIDE provides outbreak surveillance reports on a monthly and annual basis, and upon request. This report provides a brief description of confirmed outbreaks during the third quarter of 2015. All data provided are provisional, since several investigations are ongoing.

Methods

Data on outbreaks are routinely compiled in Microsoft Excel 2010. Data analyzed for the purpose of this report include information on outbreak type and setting, reporting region, time of reporting to LHDs and DIDE by region, clinical diagnosis, and laboratory information.

Results

During the months of July, August, and September 2015, there were 32 outbreaks reported in West Virginia. Of the 32 reported outbreaks, 29 (91%) were confirmed as outbreaks or clusters of disease, 2 are under ongoing investigation, 17 were reported from healthcare facilities, 3 from schools, 2 from communities, 3 from day care facilities, 1 from a sports team, 1 from a church group, and 2 were part of multi-state investigations.

Among the 17 healthcare-associated outbreaks reported, 15 were from long-term care facilities (LTCFs), 1 from a hospital, and 1 from an outpatient clinic.

The following tables summarize the confirmed outbreaks:

Enteric Disease Outbreaks from July-September 2015 (n=11)

Type of Outbreak or Cluster	Number of Outbreaks	Outbreak Setting	Laboratory Testing
Acute Gastroenteritis	7	5 LTCFs	Not Done
		1 Sports Team	Not Done
		1 Church	Negative or Non-contributory
Salmonellosis	1	Multi-state	Confirmed
Norovirus Gastroenteritis	1	Multi-state	Confirmed
Salmonellosis	1	Community	Confirmed
Campylobacteriosis	1	Community	Confirmed

(See **Outbreaks**, page 10)

*(Outbreaks, continued from page 9)***Respiratory Illness Outbreaks from July-September 2015 (n=6)**

Type of Outbreak or Cluster	Number of Outbreaks	Outbreak Setting	Laboratory Testing
Rhinovirus/Enterovirus Respiratory Illness	2	LTCF	PCR* Confirmed
		Hospital	PCR* Confirmed
Acute Respiratory Illness	3	LTCFs	Not Done
Parainfluenza Respiratory Illness	1	LTCF	PCR* Confirmed

* PCR: Polymerase Chain Reaction

Rash Outbreaks from July-September 2015 (n=8)

Type of Outbreak or Cluster	Number of Outbreaks	Outbreak Setting	Laboratory Testing
Scabies	3	2 LTCFs	Not Done
		1 Daycare	Not Done
Hand, Foot, and Mouth Disease	3	2 Daycare	Not Done
		1 School	Not Done
Impetigo	1	School	Not Done
Undifferentiated Skin Rash	1	LTCF	Negative or Noncontributory

Multidrug-Resistant Organism (MDRO) Outbreaks from July-September 2015 (n=1)

Type of Outbreak or Cluster	Number of Outbreaks	Outbreak Setting	Laboratory Testing
Methicillin-resistant Staphylococcus aureus (MRSA)	1	Sports Team	Confirmed

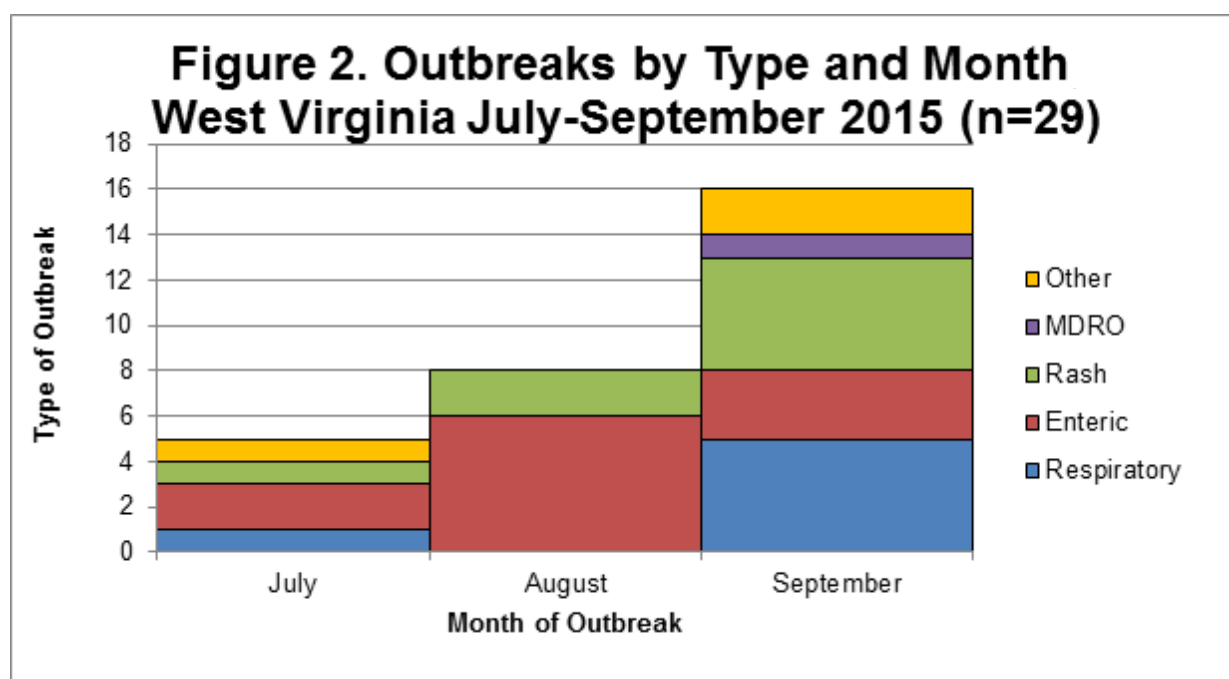
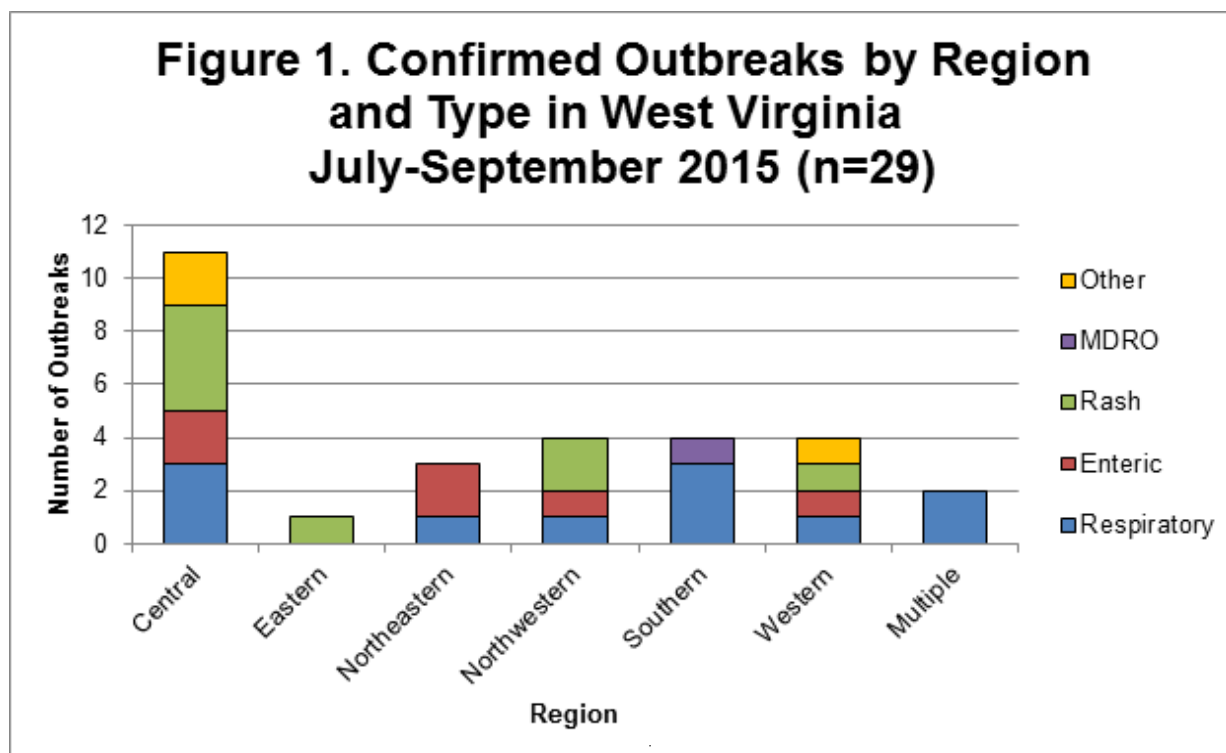
Other Outbreaks from July-September 2015 (n=3)

Type of Outbreak or Cluster	Number of Outbreaks	Outbreak Setting	Laboratory Testing
Conjunctivitis	3	2 LTCFs	Not Done
		1 Outpatient Clinic	Confirmed

(See Outbreaks, page 11)

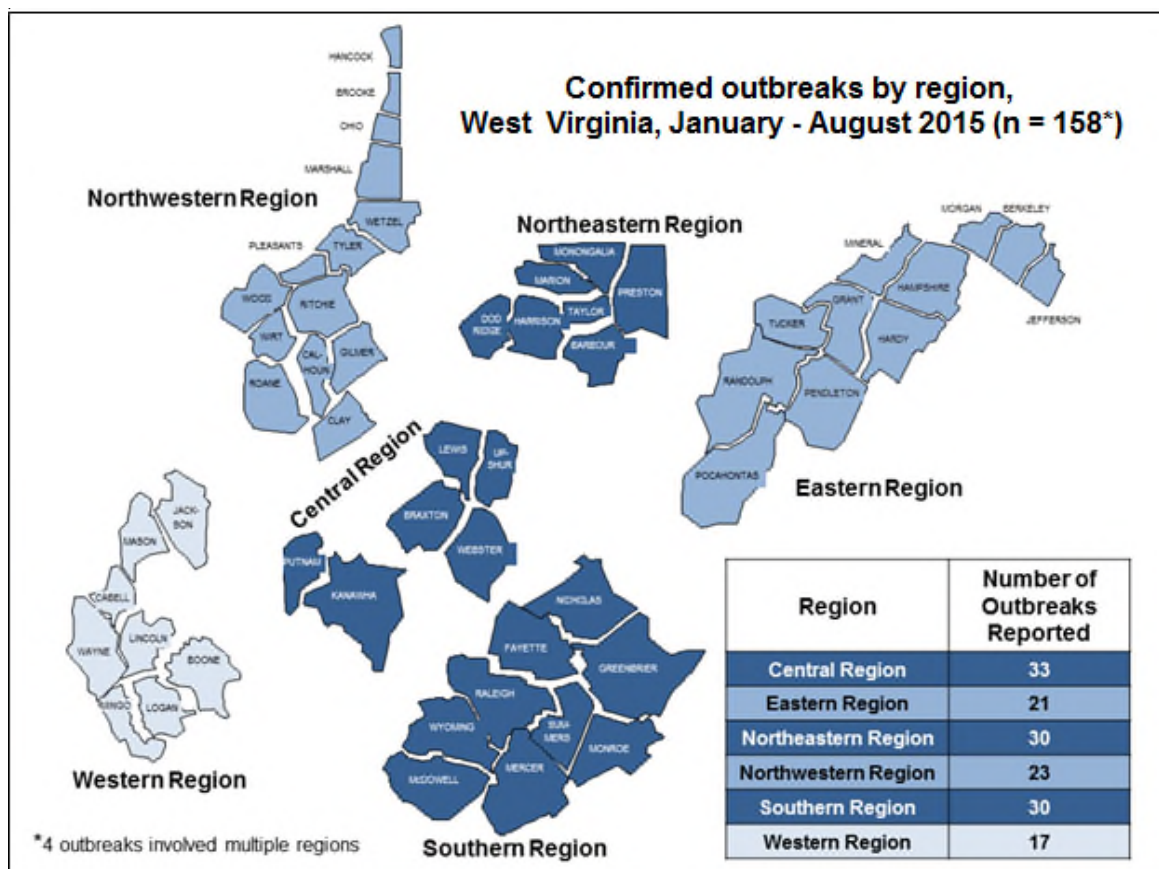
(*Outbreaks*, continued from page 10)

During this period, all surveillance regions reported outbreaks (Figure 1). Enteric outbreaks were the most common outbreaks reported during this period, accounting for 38% of all confirmed outbreaks (Figure. 2). Rash illness outbreaks represented the second most common outbreak at 28%.



(See *Outbreaks*, page 12)

(*Outbreaks, continued from page 11*)



Limitations

Data provided in this report are provisional since some investigations are ongoing.

Conclusions

A wide variety of outbreaks this quarter illustrates the type of situations that local health departments must be prepared to deal with on a regular basis. Outbreak investigations test the capacity of health departments to receive reports, do epidemiological investigations, secure appropriate laboratory testing and summarize and share findings.

To assist local health departments in this task, the West Virginia Bureau for Public Health has published a variety of outbreak toolkits at www.dhhr.wv.gov/oeps/disease/ob/Pages/OutbreakToolkits.aspx. The toolkits consist of brief guidelines for defining, investigating and managing the outbreak, and collecting laboratory specimens. Toolkits are available for most of the common outbreaks that occur in West Virginia.

Local health departments must also share results of their investigations with stakeholders. To facilitate that vital form of communication, outbreak report forms are found at www.dhhr.wv.gov/oeps/disease/ob/pages/outbreakfinalreports.aspx. Reports are designed to be populated easily with information about the outbreak. The completed report form can be filed at the health department as a permanent record of the investigation and shared with stakeholders along with recommendations for disease prevention and control. In 2014, outbreak reports were completed for 182 (98%) of 186 reported outbreaks, representing a steady increase in the proportion of outbreaks that have a completed report documenting investigation and control activities.

For information on outbreak guidelines or any disease, please visit the Division of Infectious Disease Epidemiology's website at www.dide.wv.gov or call (304) 558-5358, ext. 1, or toll free in West Virginia: (800) 423-1271. ☒

Newly reported verified cases of tuberculosis in West Virginia 2008 through first half of 2015

COUNTY	CENSUS 2010	2008	2009	2010	2011	2012	2013	2014	1st Half 2015	1st Half 201 I-RATE
Barbour	16,589	1	0	0	0	0	0	0	0	0.00
Berkeley	104,169	5	0	1	1	0	1	1	0	0.00
Boone	24,629	0	0	0	0	0	0	1	1	4.06
Braxton	14,523	0	0	0	0	0	0	0	0	0.00
Brooke	24,069	1	0	0	0	0	0	0	0	0.00
Cabell	96,319	4	3	0	2	2	3	2	0	0.00
Calhoun	7,627	0	0	0	0	0	0	0	0	0.00
Clay	9,386	0	0	0	0	0	0	0	0	0.00
Doddridge	8,202	0	0	0	0	0	1	2	0	0.00
Fayette	46,039	1	0	0	0	0	0	0	0	0.00
Gilmer	8,693	0	2	3	0	1	0	0	0	0.00
Grant	11,937	0	0	0	0	0	1	0	0	0.00
Greenbrier	35,480	0	0	0	0	0	0	1	0	0.00
Hampshire	23,964	0	0	0	0	0	0	0	0	0.00
Hancock	30,676	0	0	0	0	0	0	0	0	0.00
Hardy	14,025	0	0	0	1	0	0	0	0	0.00
Harrison	69,099	0	0	0	1	0	1	0	1	1.45
Jackson	29,211	0	0	0	0	0	0	0	0	0.00
Jefferson	53,498	1	0	0	1	0	1	0	0	0.00
Kanawha	193,063	2	2	1	0	1	0	2	1	0.52
Lewis	16,372	0	0	0	0	0	0	0	0	0.00
Lincoln	21,270	0	0	0	0	0	0	0	0	0.00
Logan	36,743	0	0	2	0	1	0	1	0	0.00
Marion	56,418	0	0	0	0	0	1	0	0	0.00
Marshall	33,107	0	0	1	0	0	0	0	0	0.00
Mason	27,324	0	1	0	0	0	0	1	0	0.00
McDowell	22,113	1	2	0	1	1	0	0	0	0.00
Mercer	62,264	0	2	0	1	0	1	1	0	0.00
Mineral	28,212	0	1	0	0	0	0	0	0	0.00
Mingo	26,839	0	0	1	0	0	0	0	0	0.00
Monongalia	96,189	1	2	2	1	0	2	0	1	1.04
Monroe	13,502	0	0	0	0	0	0	0	0	0.00
Morgan	17,541	1	0	0	0	0	0	0	0	0.00
Nicholas	26,233	0	0	1	0	0	0	0	0	0.00
Ohio	44,443	1	1	0	0	0	0	0	0	0.00
Pendleton	7,695	0	0	0	0	0	1	0	0	0.00
Pleasants	7,605	0	0	0	0	0	0	0	0	0.00
Pocahontas	8,719	1	0	0	0	0	0	0	0	0.00
Preston	33,520	0	0	1	0	0	0	0	0	0.00
Putnam	55,486	1	1	0	2	0	0	0	0	0.00
Raleigh	78,859	4	1	0	1	1	0	0	0	0.00
Randolph	29,405	0	0	1	0	0	0	0	0	0.00
Ritchie	10,449	0	0	0	0	0	0	0	0	0.00
Roane	14,926	0	0	0	0	0	0	0	0	0.00
Summers	13,927	0	0	0	0	0	0	0	1	7.18
Taylor	16,895	0	0	0	0	0	0	0	0	0.00
Tucker	7,141	0	0	0	0	0	0	0	0	0.00
Tyler	9,208	0	0	0	0	0	0	0	0	0.00
Upshur	24,254	0	0	0	0	0	0	1	0	0.00
Wayne	42,481	0	0	1	1	1	0	0	0	0.00
Webster	7,154	0	0	0	0	0	0	0	0	0.00
Wetzel	16,583	0	1	0	0	0	0	0	0	0.00
Wirt	5,717	0	0	0	0	0	0	0	0	0.00
Wood	86,956	2	0	0	0	0	0	0	0	0.00
Wyoming	23,796	1	0	0	0	0	0	0	0	0.00
TOTAL	1,852,994	28	19	15	13	8	13	13	5	
I-Rate for WV		1.5	1	0.82	0.7	0.43	0.70	0.70	0.27	
# Counties with TB Cases		15	12	11	11	7	10	10	5	

Tuberculosis in West Virginia

Clinical data for January 1 through June 30, 2015

STATUS AT DIAGNOSIS OF TB

CLASSIFICATION	NUMBER OF RECORDS	PERCENT
Alive	5	100.00%
Dead	0	0.00%
Unknown/Missing	0	0.00%
TOTAL	5	100.00%

PREVIOUS DIAGNOSIS OF TB

CLASSIFICATION	NUMBER OF RECORDS	PERCENT
No	5	100.00%
Yes	0	0.00%
Unknown/Missing	0	0.00%
TOTAL	5	100.00%

SITE OF DISEASE

CLASSIFICATION	NUMBER OF RECORDS	PERCENT
Pulmonary	3	60.00%
Extrapulmonary	2	40.00%
Both	0	0.00%
Site Not Stated/Missing	0	0.00%
TOTAL	5	100.00%

SPUTUM SMEAR

CLASSIFICATION	NUMBER OF RECORDS	PERCENT
Positive	1	20.00%
Negative	2	40.00%
Not Done	2	40.00%
Unknown/Missing	0	0.00%
	5	100.00%

(See *Tuberculosis*, page 15)

*(Tuberculosis, continued from page 14)***SPUTUM CULTURE**

CLASSIFICATION	NUMBER OF RECORDS	PERCENT
Positive	2	40.00%
Negative	0	0.00%
Not Done	2	40.00%
Unknown/Missing (results pending)	1	20.00%
TOTAL	5	100.00%

MICROSCOPIC EXAM OF TISSUE AND OTHER BODY FLUIDS

CLASSIFICATION	NUMBER OF RECORDS	PERCENT
Positive	1	20.00%
Negative	0	0.00%
Not Done	4	80.00%
Unknown/Missing	0	0.00%
TOTAL	5	100.00%

CULTURE OF TISSUE AND OTHER BODY FLUIDS

CLASSIFICATION	NUMBER OF RECORDS	PERCENT
Positive	0	0.00%
Negative	0	0.00%
Not Done	5	100.00%
Unknown	0	0.00%
Missing	0	0.00%
TOTAL	5	100.00%

CHEST X-RAY

CLASSIFICATION	NUMBER OF RECORDS	PERCENT
Normal	3	60.00%
Abnormal	2	40.00%
Not Done/Unknown/Missing	0	0.00%
TOTAL	5	100.00%

(See Tuberculosis, page 16)

(*Tuberculosis*, continued from page 15)

TUBERCULIN (MANTOUX) SKIN TEST AT DIAGNOSIS

CLASSIFICATION	NUMBER OF RECORDS	PERCENT
Positive	1	20.00%
Negative	0	0.00%
Not Done	4	80.00%
Unknown	0	0.00%
Missing	0	0.00%
TOTAL	5	100.00%

HIV STATUS

CLASSIFICATION	NUMBER OF RECORDS	PERCENT
Negative	4	80.00%
Positive	0	0.00%
Indeterminate	0	0.00%
Refused	0	0.00%
Not Offered	0	0.00%
Test Done, Results Unknown	0	0.00%
Unknown	1	20.00%
Missing	0	0.00%
TOTAL	5	100.00%

INITIAL DRUG REGIMEN

CLASSIFICATION	NUMBER OF RECORDS	PERCENT
No Drugs	0	0.00%
One Drug	0	0.00%
*INH, RIF, PZA, and EMB or SM	4	80.00%
*INH, RIF, and PZA	1	20.00%
*INH and RIF	0	0.00%
Any other multiple drug combination	0	0.00%
Unknown	0	0.00%
TOTAL	5	100.00%

*Drugs noted above are Isoniazid (INH), Rifampin (RIF), Pyrazinamide (PZA), Ethambutol (EMB), and Streptomycin (SM).

(See *Tuberculosis*, page 17)

*(Tuberculosis, continued from page 16)***Demographic data for January 1 through June 30, 2015****ETHNICITY**

CLASSIFICATION	NUMBER OF RECORDS	PERCENT
Hispanic or Latino	1	20.00%
Not Hispanic or Latino	4	80.00%
Unknown or Missing	0	0.00%
TOTAL	5	100.00%

RACE

CLASSIFICATION	NUMBER OF RECORDS	PERCENT
Single Race:		
American Indian or Alaska Native	0	0.00 %
Asian	1	20.00%
Black or African-American	0	0.00%
Native Hawaiian or Pacific Islander	0	0.00%
White	4	80.00%
Multiple Races	0	0.00%
Unknown/Missing	0	0.00%
TOTAL	5	100.00%

SEX

CLASSIFICATION	NUMBER OF RECORDS	PERCENT
Male	3	60.00%
Female	2	40.00%
Unknown/Missing	0	0.00%
TOTAL	5	100.00%

COUNTRY OF ORIGIN

CLASSIFICATION	NUMBER OF RECORDS	PERCENT
USA	3	60.00%
Non-US	2	40.00%
Unknown/Missing	0	0.00%
	5	100.00%

(See Tuberculosis, page 18)

*(Tuberculosis, continued from page 17)***5 YEAR AGE GROUP**

CLASSIFICATION	NUMBER OF RECORDS	PERCENT
0 – 4	0	0.00%
5 – 9	0	0.00%
10 – 14	1	20.00%
15 – 19	0	0.00%
20 – 24	1	20.00%
25 – 29	0	0.00%
30 – 34	0	0.00%
35 – 39	0	0.00%
40 – 44	0	0.00%
45 – 49	1	20.00%
50 – 54	0	0.00%
55 – 59	0	0.00%
60 – 64	0	0.00%
65 – 69	0	0.00%
70 – 74	0	0.00%
75 – 79	1	20.00%
80 – 84	0	0.00%
85 and Older	1	20.00%
Unknown	0	0.00%
TOTAL	5	100.00%

10 YEAR AGE GROUP

CLASSIFICATION	NUMBER OF RECORDS	PERCENT
0 – 9	0	0.00%
10 – 19	1	20.00%
20 – 29	1	20.00%
30 – 39	0	0.00%
40 – 49	1	20.00%
50 – 59	0	0.00%
60 – 69	0	0.00%
70 – 79	1	20.00%
80 and Older	1	20.00%
Unknown	0	0.00%
TOTAL	5	100.00%

(See Tuberculosis, page 19)

*(Tuberculosis, continued from page 18)***HOMELESS WITHIN PAST YEAR**

CLASSIFICATION	NUMBER OF RECORDS	PERCENT
No	5	100.00%
Yes	0	0.00%
Unknown/Missing	0	0.00%
TOTAL	5	100.00%

RESIDENT OF A CORRECTIONAL FACILITY AT TIME OF DIAGNOSIS

CLASSIFICATION	NUMBER OF RECORDS	PERCENT
No	5	100.00%
Yes	0	0.00%
Unknown/Missing	0	0.00%
TOTAL	5	100.00%

RESIDENT OF A LONG-TERM CARE FACILITY AT TIME OF DIAGNOSIS

CLASSIFICATION	NUMBER OF RECORDS	PERCENT
No	5	100.00%
Yes	0	0.00%
Unknown/Missing	0	0.00%
TOTAL	5	100.00%

INJECTED DRUG USE WITHIN PAST YEAR

CLASSIFICATION	NUMBER OF RECORDS	PERCENT
No	5	100.00%
Yes	0	0.00%
Unknown/Missing	0	0.00%
TOTAL	5	100.00%

NON-INJECTED DRUG USE WITHIN PAST YEAR

CLASSIFICATION	NUMBER OF RECORDS	PERCENT
No	5	100.00%
Yes	0	0.00%
Unknown/Missing	0	0.00%
TOTAL	5	100.00%

(See Tuberculosis, page 20)

(*Tuberculosis*, continued from page 19)

EXCESS ALCOHOL USE WITHIN PAST YEAR

CLASSIFICATION	NUMBER OF RECORDS	PERCENT
No	5	100.00%
Yes	0	0.00%
Unknown/Missing	0	0.00%
TOTAL	5	100.00%

OCCUPATION

CLASSIFICATION	NUMBER OF RECORDS	PERCENT
Healthcare Worker	0	0.00%
Correctional Employee	0	0.00%
Migratory Agricultural Worker	0	0.00%
Other Occupation	1	20.00%
Retired	1	20.00%
Not Seeking Employment (e.g., student, etc.)	1	20.00%
Not Employed Within Past 24 Months	2	40.00%
Unknown/Missing	0	0.00%
TOTAL	5	100.00%

The **West Virginia EPI-LOG** is published quarterly by the West Virginia Department of Health and Human Resources, Bureau for Public Health, Office of Epidemiology & Prevention Services. Graphic layout by Chuck Anziulewicz. Please call the Office of Epidemiology & Prevention Services at (304) 558-5358 if you need additional information regarding any article or information in this issue. If you have ideas or contributions you would like to make in a future issue, ask for editor Loretta Haddy.